

THE CHALLENGES TO THE GROWTH OF THE UNITED STATES CERAMIC TILE MARKET

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This Debate Forum is being developed for Qualicer 2006, in order to assess forecasts for growth of the consumption of ceramic tile in the United States of America for the next several years. The panel will explore challenges and obstacles that are likely to be faced by the tile industry in the United States that could inhibit the expected continuation of increased consumption.

The panel of experts will explore building construction practices in the U.S. and compare their suitability to the changing technological advancements in the tile industry. An examination of the vast differences in geography and climate will be discussed, including comparisons between residential and commercial installation trends in these areas. An exploration of the trends in relation to fashion, design and consumer preference and a comparison to competitive products to ceramic tile will also be featured.

The lively discussion in the first stage of the Debate and in the subsequent unfolding of the discussion in the Qualicer Congress, should provide invaluable insight into the United States Ceramic Tile Market and help to contribute to new ideas, strategies and solutions to meeting the challenges that could prevent the tile industry from meeting and exceeding the projections for growth.

1. BRIEF SUMMARY OF UNITED STATES TILE MARKET

In the period from 1995 to 2004, United States consumption of ceramic tile has grown from 113 million square meters to 292 million square meters, an increase of 71.4%. Since 2000, consumption has been growing at an average of almost 9% annually. Several factors can be attributed to the growth of ceramic tile in the United States in recent years.

- Increased Awareness and Consumer Demand
- Steady growth in housing and continued low interest rates
- Healthy U.S. Economy
- Growth of big box retailers and their commitment to ceramic tile
- Growth of Floorcovering Retailers and their commitment to ceramic tile
- Trends in housing towards larger bathrooms, kitchens, etc. conducive to the use of ceramic tile
- Continued availability of ceramic tile coupled with favorable costs versus competitive products

Forecasters predict that ceramic tile consumption will continue to experience steady growth at a rate of approximately 7% if all economic factors continue at the present pace. Certainly unknown factors such as the economy, strength of the U.S. dollar, and the threat of terrorism and war could significantly alter this expected growth.

For the purpose of this debate, our panelists will discuss issues that can be addressed strategically within our industry.

2. THE WAY HOMES ARE BEING BUILT IN THE UNITED STATES

Over the past several years in the United States the tile industry has seen a number of changes related to both products and construction trends. Some of these trends have had a profound impact how tile needs to be installed.

- Increased size of homes with more open spaces
- Bigger and more elaborate kitchen spaces
- Larger master bathrooms with walk in closets
- Increased usage of ceramic tile
- Explosion of porcelain tile, glass, and other dense bodied tiles
- Increased size of tile formats
- The use of radiant heat
- The use of engineered wood products
- The desire to speed up the whole installation process

In addition to the general trends in home construction, a great number of new products have been introduced to construct the home or used as finishes. Traditional construction methods were based around dimensional lumber and spans in traditional lumber framed structures seldom exceeded 14 to 16 feet. Today, with the advent of engineered wood products, homes in the U.S. are no longer limited by the capacities and length of traditional lumber structural elements. Spans that weren't dreamed of just a few years ago, is now common day practice in today's construction methods.

The impact of all these changes has to be recognized and strategies need to be developed to ensure successful installations. When homes get larger in scale and utilize larger spans with wider joist or truss spacing, engineering will need to be correct in terms of anticipated use, all live and dead loads, deflection or floor stiffness, and radius of curvature. As tile materials become denser in nature and larger in scale or size, the installation materials and methods may need to be altered from years past.

This could be the first objective of the Debate Forum.

3. THE CHANGING WORKFORCE IN THE U.S. CERAMIC TILE MARKET

For many years, in a market of steady growth of ceramic tile consumption, the requirements for quality labor were met by local unions and skills passed on from generation to generation in family owned businesses. These sources of skilled labor development remain viable today, but due to the significant increase in demand for ceramic tile and quality installation, it is becoming increasingly difficult in many markets to satisfy this need. Moreover, in numerous states in the U.S., trade unions are less likely, and often times unlikely, to play a significant role in training and education. In fact, in many states there is little, if any, union presence.

In addition, the tile industry trails other construction related vocations in recruitment and training. The trend until recently was to train personnel independently and often according to practices handed down from generation to generation, rather than in adherence to accepted standards and methods in the industry. Little or no effort has taken place in a proactive approach to education and marketing of the career potential for a young person considering ceramic tile installation for a vocation. Many industry organizations have created curriculum, training manuals, and educational seminars; however, these efforts are directed more to people already in the industry and not directly to potential entry-level personnel. It will take the resources and involvement of the total tile industry in the United States to develop recruitment and retention programs to attract new installers into the trade. This will not be an easy endeavor because of the competition for the same people by other larger, organized construction trade organizations. A substantial portion of the cost of training and education, recruitment and retention and advertising may need to come from the international sector that enjoys a majority of the market share in the United States.

Finally, with an ever-increasing need for individuals to install ceramic tile, numerous challenges are taking place in many geographic regions in regards to the hiring of minorities in the workplace. The ability to communicate effectively safety practices, training techniques, and installation instructions becomes tantamount to success for the installation company.

This could be the second objective of the Debate Forum

4. LEADING CAUSES OF INSTALLATION FAILURE IN THE UNITED STATES

The failure to follow established industry standards and guidelines in the United States is perhaps the prelude to the majority of ceramic tile installation failures. It is imperative that increased awareness of and adherence to these standards is promoted by the entire ceramic tile industry. Leaders are faced with mounting pressure to maintain quality standards in a market subjected to increasing consumption of imported ceramic tile in a variety of formats and properties.

Leading causes of tile installation failure in the United States include but are not limited to the following:

- Use of inappropriate materials
- Lack of adequate mortar coverage
- Efflorescence
- Failure to follow manufacturer's instructions
- Deflection
- Improper installation techniques
- Lack of Movement Joints
- Reflective Cracking
- Inferior quality of tile and allied products
- Continued investment for emphasis on sales
- Lack of investment for emphasis on installation

There are numerous explanations related to the causes of such installation failures. Often times a failure occurs due to improper specification, inadequate engineering for the product specified, or questionable construction practices. No matter what the cause, ceramic tile installations that fail are extremely costly to replace and significantly affect future sales. In addition, these failures open the door for competitive products to be considered both in the present and in the future.

This could be the third objective in the debate forum

5. THE GROWTH OF THE RETAIL MARKET

In 1985, Home Centers began to sell ceramic tile in the United States, opening with 4% of the market. In 2004, they accounted for 22% of the market and much credit can be given to them for the expansion of the ceramic tile market in the U.S. In addition, traditional floorcovering manufacturing giants such as Shaw and Mohawk have invested significant capital and resources into their ceramic tile programs. This in turn has prompted the specialty retailer to invest into ceramic tile in order to keep up with the competition and continue to supply their customers with brand name products such as those listed above.

In order to keep up with this trend, independent flooring distributors who survived these difficult times are faced with many challenges. First and foremost, the leaders of the organization must demonstrate a commitment to understanding the ceramic tile industry and must spearhead an organizational change in philosophy. This has proven to be more difficult than it would appear.

Home Centers and Big Box Retailers are faced with the dilemma of an inadequate labor pool in which to draw from, necessitating their respective companies to implement effective training and educational programs. Due to the volatile nature of employee retention, this process can be painstakingly difficult, even for large corporations like Home Depot and Lowes.

It must also be noted that even though big box retailers have played a significant role in increasing per capita consumption of ceramic tile in the U.S., the fact that the majority of the product sold by these companies is to direct consumers with little or no information on how to properly install tile. This in itself can lead to inadequate, failed installations, resulting in a switch from ceramic tile to competitive, alternate products.

This could be the fourth objective in the debate forum

6. ALTERNATIVE FLOORING

Over the past ten years there has been a gradual shift away from soft floor surfaces towards hard surfacing materials. While ceramic tile has enjoyed a gain in market share there is a list of alternative products for consumers to select from:

- Hardwood
- Engineered wood
- Laminates
- Bamboo
- Vinyl
- Concrete
- Stone

In many cases safety, health, indoor air quality, maintenance and the environment are the issues that have compelled consumers to reconsider the once traditional use of wall to wall broadloom. Not only are the powerful US carpet mills fighting back with information campaigns regarding their sustainable re-invention but, the other hard surface industries have devised superior marketing strategies to identify their products benefits.

The ceramic tile industry must take an active and aggressive role comparing competing hard surface materials regarding:

- Maintenance
- Durability

- Range of use
- Fashion & modular design graphics
- Co-generation
- Recycling
- Corporate citizenship
- Leed compliance
- Indoor Air Quality

This could be the fifth objective in the debate forum

7. THE GEOGRAPHIC DIVERSITY OF CERAMIC TILE IN THE UNITED STATES

It is impossible to outline effective strategies to market the continued growth of ceramic tile in the United States without understanding the differences in both the geographical and ethnic make-up of the country in relation to tile consumption and consumer preference. A strong cross-section of industry experts with specific geographic expertise in the ceramic tile market needs to be consulted and interviewed, with the understanding that different strategies will need to be employed in these areas.

The following data will be discussed by the panel and will be the subject of the sixth and final objective of the debate.

7.1. FIRST RESEARCH INDUSTRY PROFILE 6/27/2005 –BIBLIOGRAPHIC CREDIT

The floor coverings industry in the US includes about 700 manufacturers; 4,000 wholesalers; and 15,000 retailers; with combined annual end-user sales of \$25 billion. Major manufacturers include Shaw, Mohawk, Beaulieu, and Armstrong. Large retail franchise chains include Flooring America and Carpet One, both operated by CCA Global Partners. The industry is highly concentrated at the manufacturing end, where the four largest companies hold close to 75 percent of the market, and highly fragmented at the retail end, where the top 50 companies hold just 10 percent.

The industry produces and sells carpets and rugs, hardwood flooring, “resilient” plastic sheeting, and ceramic tiles. Tufted nylon carpeting accounts for about 50 percent of industry sales, followed by plastic sheeting and tiles 23 percent, rugs and other carpets 15 percent and wood flooring 12 percent.

7.2. REPORT FROM SWISS BUSINESS HUB USA – DEC. 2004, ON THE DEVELOPMENT AND THE PERSPECTIVES FOR THE US FLOOR COVERINGS INDUSTRY – BIBLIOGRAPHIC CREDIT

The US is the ninth largest producer of ceramic tile in the world. It is the largest importer on a yearly square footage basis and is the fourth largest consumer of ceramic tile on an absolute basis. The states of the south and west lead in ceramic tile consumption, particularly California, Florida, Texas and Arizona.



Following is a list of the top twenty US cities ranked by population. Average temperatures in January and July are also listed.

Rank	City	Population	Temp. °F	
			Jan	July
1	New York, NY	8.104.079	32.1	76.5
2	Chicago, Ill.	3.845.541	22.0	73.3
3	Los Ángeles, Calif.	2.862.244	57.1	69.3
4	Philadelphia, Pa.	2.012.626	32.3	77.6
5	Detroit, Mich.	1.470.151	24.5	73.5
6	Baltimore, Md.	1.418.041	32.3	76.5
7	Houston, Texas	1,263.756	51.8	83.6
8	Cleveland, Ohio	1.236.249	25.7	71.9
9	Washington, DC	1.210.393	34.9	79.2
10	St. Louis, Mo	904.522	29.6	80.2
11	Milwaukee, Wis.	900.198	20.7	72.0
12	San Francisco, Calif.	784.242	49.4	62.8
13	Boston, Mass.	777.704	29.3	73.9
14	Dallas Ft. Worth, Texas	744.230	44.1	85.0
15	Nueva Orleans, La	730.008	52.6	82.7
16	Pittsburgh, Pa.	681.804	27.5	72.6
17	San Antonio, Texas	671.929	50.3	84.3
18	San Diego, Calif.	636.251	57.8	70.9
19	Seattle, Wash.	603.337	40.9	65.3
20	Buffalo, NY	594.359	24.5	70.8

